IN THE CLAIMS

The status of the claims as presently amended is as follows:

1. (*Previously Presented*) A sound reproducing apparatus for driving a plurality of speakers with two of the speakers having a known distance therebetween to reproduce multi-channel sound, the sound reproducing apparatus comprising:

a generator configured to generate a measuring signal and supply the measuring signal to each of the plurality of speakers;

at least two sensors positionable to a listening position, each of the at least two sensors transmitting a reception notification when receiving a measuring sound wave radiated from each of the speakers in accordance with the measuring signal;

a time difference measuring unit configured to measure a time difference between a time instant when the measuring signal is generated and a time instant when the reception notification is received from each of the at least two sensors;

a distance calculator configured to calculate a distance between the at least two sensors and a distance between each of the at least two sensors and each of the two speakers based on the measured time difference and the known distance between the two speakers;

a position calculator configured to calculate a position of each of the two speakers based on the calculated distance between the at least two sensors and the calculated distance between each of the two speakers from each of the at least two sensors; and

a storage that stores the calculated position of the two speakers relative to the at least two sensors.

2. (*Currently Amended*) A sound reproducing apparatus for driving a plurality of speakers to reproduce multi-channel sound, the sound reproducing apparatus comprising:

a generator configured to generate a measuring signal and supply the measuring signal to a to-be-detected speaker of the plurality of speakers;

at least two sensors disposed in a listening position, each of the at least two sensors transmitting a reception notification when receiving a measuring sound wave radiated from the to-be-detected speaker in accordance with the measuring signal;

a time difference measuring unit configured to measure, as to each of the at least two sensors, a time difference between a time instant when the measuring signal is generated and a time instant when the reception notification is received from each of the at least two sensors;

a distance calculator configured to calculate, as to each of the at least two sensors, a distance between each of the at least two sensors and the to-be-detected speaker based on the measured time difference;

a position calculator configured to calculate a position of the to-be-detected speaker based on a distance between the at least two sensors and the calculated distance;

a storage that stores the calculated position of the to-be-detected speaker; and

a speaker layout corrector configured to ~~change over~~ swap signals of signal lines output from an amplifier to the speakers between at least a pair of speakers that are incorrectly positioned to ~~and~~ correct an incorrect layout of the speakers when respective speaker positions stored in the storage are out of a predetermined relative position relationship of the speakers.

3. (*Previously Presented*) The sound reproducing apparatus according to Claim 1, further comprising a sound field controller configured to produce sound image localization as if the speakers were located in predetermined recommended positions, respectively, based on respective positions of the speakers stored in the storage.

4. (*Canceled*)

5. (*Currently Amended*) A sound reproducing apparatus for driving a plurality of speakers to reproduce multi-channel sound, the sound reproducing apparatus comprising:

a generator configured to generate a measuring signal and supply the measuring signal in turn to two of the plurality of speakers having a known ~~positions with respect to a listening position~~ distance therebetween;

a sensor attached to a to-be-detected speaker and transmits a reception notification as to each of the two speakers when receiving a measuring sound wave radiated from each of the two speakers in accordance with the measuring signal;

a time difference measuring unit configured to measure, as to each of the two speakers, a time difference between a time instant when the measuring signal is generated and a time instant when the reception notification is received from the sensor;

a distance calculator configured to calculate a distance between each of the two speakers and the to-be-detected speaker based on the measured time difference;

a position calculator configured to calculate a position of the to-be-detected speaker based on the known distance between the two speakers and the calculated distance; ~~and~~

a storage that stores ~~positions of the two speakers and~~ the calculated ~~speaker~~ position_ of the to-be-detected speaker; and

a speaker layout corrector configured to ~~change over~~ swap signals of signal lines output from an amplifier to the speakers between at least a pair of speakers that are incorrectly positioned to ~~and~~ correct an incorrect layout of the speakers when respective speaker positions stored in the storage are out of a predetermined relative position relationship of the speakers.

6. (*Canceled*)

7. (*Previously Presented*) The sound reproducing apparatus according to Claim 5, further comprising a sound field controller configured to produce sound image localization as if the speakers were located in predetermined recommended positions, respectively, based on respective speaker positions stored in the storage.

8. (*Currently Amended*) A method of identifying positions of a plurality of speakers using at least two sensors disposed in a listening position, the method comprising the steps of:

generating a measuring signal and supplying the measuring signal to one of the plurality of speakers;

transmitting a reception notification when each of the at least two sensors receives a measuring sound wave radiated from the one speaker in accordance with the measuring signal;

measuring a time difference between a time instant when the measuring signal is generated and a time instant when the reception notification is received from each of the at least two sensors;

calculating a distance between each of the at least two sensors and the one speaker based on the measured time difference;

calculating a position of the one speaker based on a distance between the at least two sensors and the calculated distance;

storing the calculated position of the speaker into a storage; and

~~changing over~~ swapping signals of signal lines output from an amplifier to the speakers between at least a pair of speakers that are incorrectly positioned to ~~and~~ correct[[ing]] an incorrect layout of the speakers when stored positions of the speakers are out of a predetermined relative position relationship of the speakers.

9. (*Canceled*)

10. (*Original*) The method according to Claim 8, further comprising the step of producing sound image localization as if the speakers were located in predetermined recommended positions respectively, based on stored positions of the speakers.

11. (*Previously Presented*) A method of identifying a position of each of a plurality of speakers using at least two sensors disposed in a listening position, the method comprising the steps of:

supplying the measuring signal in turn to two of the plurality of speakers having a known distance from each other;

transmitting a reception notification when each of the at least two sensors receives a measuring sound wave radiated from each of the two speakers in accordance with the measuring signal;

measuring a time difference between a time instant when the measuring signal is generated and a time instant when the reception notification is received from each of the at least two sensors for each of the two speakers;

calculating a distance between the at least two sensors and a distance between each of the two sensors and each of the two speakers based on the measured time difference and the known distance between the two speakers;

calculating positions of the at least two sensors relative to the two speakers based on the calculated distance between the at least two sensors and the calculated distance between each of the two speakers and each of the at least two sensors;

calculating a position of each of the other of the plurality of speakers based on the calculated positions of the at least two sensors relative to the two speakers; and

storing the calculated position of each of the speakers into a storage.

12. (*Previously Presented*) The sound reproducing apparatus according to Claim 1, wherein each of the at least two sensors is positionable independent of the other.

13. (*Previously Presented*) The method according to Claim 8, wherein each of the at least two sensors is positionable independent of the other.

14. (*Previously Presented*) The method according to Claim 11, wherein each of the at least two sensors is positionable independent of the other.